Arria10 optical module

Overview

The module features up to 24 high-speed transceivers operating at up to 17. 4 Gbps and extensive I/O (LVDS and single-ended) exposed via high-speed board-to-board connectors, delivering flexible connectivity for data-intensive systems. The Arria 10 SoC FPGA System on Module (SoM) integrates an Intel® Arria 10 SoC/FPGA device combining dual-core Arm Cortex-A9 processors with high-performance programmable logic, making it ideal for heterogeneous embedded applications. It supports DDR4 memory with options up to 4 GB for the HPS and. Arria 10 FPGAs and SoC FPGAs deliver more than a full speed grade of core performance improvement and up to a 20% advantage in fMAX compared to the competition, based on publicly available OpenCore designs. Arria® 10 devices use a 20 nm ALM as the basic building block of the logic fabric. The ALM architecture is the same as the previous generation FPGAs, allowing for efficient implementation of logic functions and easy conversion of IP between the device generations. The ALM, as shown in following. The Mercury+ AA1 System-on-Chip (SoC) module combines Altera's Arria 10 ARM Processor-based SoC FPGA with fast DDR4 ECC SDRAM, eMMC flash, quad SPI flash, Gigabit Ethernet PHY and an RTC and thus forms a high-performance embedded processing solution, combining the flexibility of a CPU system with. Note: HPS (Hard Processing System) is supported only in Arria10 SX devices. FPGA/HPS All IOs in SOM Expansion connectors are 1. Bank 3B, 3C, 3A supports variable IO level setting from PMIC (1.

Article Content

intel Migration Guidelines from Arria 10 to Stratix 10 for ...

Learn how to migrate your Intel Arria 10 LL 10GbE MAC design to an Intel Stratix 10 device with these comprehensive

REFLEX CES Achilles Arria 10 SoC SOM

The Achilles SOM by REFLEX CES features an Intel® PSG Arria® 10 SX SoC FPGA. With an ARM dual-core Cortex

Arria® 10 FPGA and SoC Product Table

All packages are ball grid arrays with 1.0 mm pitch, except for U19 (U484), which is 0.8 mm pitch. A subset of pins for each package

Arria 10 SoC SoM

Arria 10 SoC SoM achieve the unprecedented increase in performance with the reduction in power, form

Flyer ARRIA 10 SoC SoM

Deliverables The following deliverables are only included with the purchase of an Arria® 10 SoC SoM Instant-DevKit :

Arria® 10 FPGA and SoC Product Table

The product table lists the features, package options, I/O pins, general-purpose I/O (GPIO) count, high-voltage I/O

FDB Intel Arria 10 FPGA Module

FDB Arria 10 Modules Ultra-Compact FPGA Modules Key Features Arria10 FPGA on an ultra-compact modules (49mm x 54mm and

Intel Arria 10 Device Datasheet

Intel® Arria® 10 Device Datasheet This datasheet describes the electrical characteristics, switching characteristics, configuration

Adaptive Logic Module

Adaptive Logic Module - 2025-12-16 Arria 10 Device Overview Product Type Device Families > Arria Families Device

Intel® Arria® 10 SoC Development Kit User Guide

1. Intel® Arria® 10 SoC Development Kit Overview This document describes the hardware features of the Intel® Arria® 10 SoC

Arria® 10 SoC FPGA System on Module

The module features up to 24 high-speed transceivers operating at up to 17.4 Gbps and extensive I/O (LVDS and single-ended)

Arria 10 Device Family Definition

Arria® 10 GT—this variant features: 17.4 Gbps transceivers for short reach applications with 12.5 Gbps backplane driving capability.

Arria 10 SoC FPGA System on Module

Arria 10 SoC FPGA System on Module with compact F34 package, featuring 32-bit DDR4 for HPS and optional ECC for enhanced

Arria® 10 FPGA and SoC FPGA Overview

With their combination of performance, power efficiency, and compact form factor, Arria 10 devices are ideal for a broad range of

Adaptive Logic Module

The Quartus® Prime software optimizes your design according to the ALM logic structure and automatically maps

ReFLEX CES Achilles Arria® 10 SoC System-on-Module

The module is available as a standalone unit or as part of a development kit. The Achilles Arria ® 10 SoC SoM is ideal

Intel® Arria® 10 Device Overview

Intel® Arria® 10 Device Overview The Intel® Arria® 10 device family consists of high-performance and power-efficient 20 nm mid

ARRIA 10 SOC SOM

Bank 3B, 3C, 3A supports variable IO level setting from PMIC (1.8V, 1.5V, 1.35V, 1.2V). Each FPGA IO Bank (2A,3A,3B,3C) which

Arria 10 SoC Development Kit User Guide | Manualzz

This User Guide provides detailed information about the hardware features of the Altera Arria 10 SoC Development Kit, including pin

ReFLEX CES Achilles Arria® 10 SoC System-on-Module

ReFLEX CES Achilles Arria® 10 SoC System-on-Module is a compact, high-performance module that combines an

Enclustra FPGA Solutions | Mercury+ AA1 | Altera Arria

High performance devices like the AMD Zynq™ Ultrascale+™ MPSoC or Altera Arria 10 need cooling in

Arria 10 FPGA System on Module

For any highly integrated System On Modules, thermal design is very important factor. iWave Supports

Intel® Arria® 10 Core Fabric and General Purpose I/Os Handbook

Logic Array Blocks and Adaptive Logic Modules in Intel® Arria® 10 Devices The logic array block (LAB) is composed of basic

Arria® 10 Device Overview

Adaptive Logic Module Intel Arria 10 devices use a 20 nm ALM as the basic building block of the logic fabric. The ALM architecture is

Arria 10 Low Latency Ethernet 10G MAC and XAUI PHY Design ...

External optical loopback test at HSMC board SFP+ modules. Sequential random bursts tests. You can configure the number of

Intel® Arria® 10 Device Overview

Adaptive Logic Module Intel Arria 10 devices use a 20 nm ALM as the basic building block of the logic fabric. The ALM architecture is

Arista Optics Modules and Cables

Arista''s Optical Modules and Cable portfolio offer a wide variety of high-density and low-power 800G (dual 400G), 400G, 200G,

Contact Us

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